## TITLE

## THICK FILM DIELECTRIC COMPOSITIONS FOR USE ON ALUMINUM NITRIDE SUBSTRATES

## **ABSTRACT**

The present invention relates to a Cd-free and Pb-free glass composition comprising, based in mol%, 1-10% MO where M is selected from Ba, Sr, Ca and mixtures thereof, 5-30% MgO, 0.3-5% CuO, 0-2.5% P<sub>2</sub>O<sub>5</sub>, 0-2.5% ZrO<sub>2</sub>, 24-45% ZnO, 2-10% Al<sub>2</sub>O<sub>3</sub>, 35-50% SiO<sub>2</sub> and 0.1-3% A<sub>2</sub>O where A is selected from the group of alkali elements and mixtures thereof wherein the glass composition is useful in thick paste dielectric materials which are compatible with AlN substrates.